

FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. ALLIA.62D3C3	APPLICATION NO. 10/644,634
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					
(USE SEVERAL SHEETS IF NECESSARY)					
		APPLICANT Schutt, et al.			
		FILING DATE August 19, 2003		GROUP 1616	

U.S. PATENT DOCUMENTS											
EXAMINER INITIAL	DOCUMENT NUMBER					DATE	NAME		CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
Q	4	2	7	6	8	8	5	07/07/81	Tickner, et al.	128	660
Q	4	4	6	6	4	4	2	08/21/84	Hilmann, et al.	128	653
Q	4	6	1	3	3	2	6	09/23/86	Szwarc	604	89
Q	4	6	8	4	4	7	9	08/04/87	D'Arrigo	252	307
Q	4	7	1	8	4	3	3	01/12/88	Feinstein	128	660
Q	4	7	7	4	9	5	8	10/04/88	Feinstein	128	660.01
Q	4	8	3	2	9	4	1	05/23/89	Berwing, et al.	424	9
Q	4	8	4	4	8	8	2	07/04/89	Widder, et al.	424	9
Q	4	8	9	8	7	3	4	02/06/90	Mathiowitz, et al.	424	426
Q	4	9	2	7	6	2	3	05/22/90	Long, Jr.	424	5

FOREIGN PATENT DOCUMENTS											
EXAMINER INITIAL	DOCUMENT NUMBER					DATE	COUNTRY		CLASS	SUBCLASS	TRANSLATION
									YES	NO	
Q	5	9	6	7	2	2	9	04/84	Japan		
K	0	2	3	0	0	9	1	08/87	Europe		
K	0	2	7	9	3	7	9	08/88	Europe		
Q	0	3	5	7	1	6	4	03/90	Europe (In German with Summary in English)		
Q	0	3	5	9	2	4	6	03/90	Europe		
Q	9	1	0	9	6	2	9	07/91	Patent Cooperation Treaty		

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)				
Q	1	Acoustic Non-Linearity Due to Micro-Bubbles in Water, Wesley & Salar, Acustica, 22: 177-182, 1969-70.			
Q	2	Ultrasonic Disruption, Alfiger, Reprinted from American Laboratory, October 1975.			
Q	3	Demonstration of Nonlinear Acoustical Effects at Biomedical Frequencies and Intensities, Carstensen, et al., Ultrasound in Medicine & Biology, 6: 159-168, 1980.			
Q	4	Textbook of Diagnostic Ultrasonography, Second Edition, by Sandra Hagen-Ansert, pp. 10-12, 1983.			

EXAMINER	HARLEY	DATE CONSIDERED	10/19/04
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.			

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OCT 16 2004
U.S. PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS												
EXAMINER INITIAL	DOCUMENT NUMBER						DATE	NAME		CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
<i>AS</i>	4	9	5	7	6	5	6	09/18/90	Cerny, et al.	252	311	
<i>AS</i>	5	0	8	8	4	9	9	02/18/92	Unger	128	667.02	
<i>AS</i>	5	1	2	3	4	1	4	06/23/92	Unger	128	654	
<i>AS</i>	5	1	4	1	7	3	8	08/25/92	Rasor, et al.	424	2	
<i>AS</i>	5	1	4	9	3	1	9	09/22/92	Unger	604	22	
<i>AS</i>	5	1	5	5	2	1	5	10/13/92	Ranney	534	16	
<i>AS</i>	5	1	9	6	1	8	3	03/23/93	Yudelson, et al.	424	9	
<i>AS</i>	5	2	0	5	2	8	7	04/27/93	Erbel, et al.	128	632	
<i>AS</i>	5	2	0	5	2	9	0	04/27/93	Unger	128	653.4	
<i>AS</i>	5	2	7	1	9	2	8	12/21/93	Schneider, et al.	424	9	

FOREIGN PATENT DOCUMENTS													
EXAMINER INITIAL		DOCUMENT NUMBER						DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
												YES	NO
<i>AS</i>		9	1	1	2	8	2	3	09/91	Patent Cooperation Treaty			
<i>AS</i>		9	1	1	5	9	9	9	10/91	Patent Cooperation Treaty			
<i>AS</i>		9	2	2	2	2	4	7	12/92	Patent Cooperation Treaty			
<i>AS</i>		9	3	0	0	9	3	0	01/93	Patent Cooperation Treaty			
<i>AS</i>		9	3	0	1	7	1	2	02/93	Patent Cooperation Treaty			
<i>AS</i>		9	3	0	3	6	7	1	03/93	Patent Cooperation Treaty			

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)									
<i>AS</i>	5	Application of ultrasonic processors, Berliner, III, <i>Biotechnology Laboratory</i> , 46-52, March 1984.								
<i>AS</i>	6	Ultrasound Enhancement of Tissues During the Capillary Phase of PFOB - 100% Immediately Post Infusion, Mattrey, M.D., "Abstract, Association of University Radiologists" 35th Annual Meeting, March 22-27, 1987.								
<i>AS</i>	7	Perfluorochemicals as US Contrast Agents for Tumor Imaging and Hepatosplenography: Preliminary Clinical Results, Mattrey, M.D., <i>Radiology</i> , 163: 339-343, 1987.								
<i>AS</i>	8	Perflurooctylbromide: A New Contrast Agent for CT, Sonography, and MR Imaging, Mattrey, M.D., Manuscript 1988								

EXAMINER	<i>MATTREY</i>	DATE CONSIDERED	<i>10/09/04</i>
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		APPLICANT Schutt, et al.			
		FILING DATE August 19, 2003		GROUP 1616	

EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME		CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
<i>ll</i>	5	3	1	5	9	9	7	05/31/94	Widder, et al.		128	653.3	
<i>ll</i>	5	3	3	3	6	1	3	08/02/94	Tickner, et al.		128	662.02	
<i>ll</i>	5	3	3	4	3	8	1	08/02/94	Unger		424	9	
<i>ll</i>	5	3	4	8	0	1	5	09/20/94	Unger, et al.		128	662.02	
<i>ll</i>	5	3	5	2	4	3	5	10/04/94	Unger		424	9	
<i>ll</i>	5	3	5	2	4	3	6	10/04/94	Wheatley, et al.		424	9	
<i>ll</i>	5	1	9	5	5	2	0	05/23/93	Schlief, et al.		128	660.01	
<i>ll</i>	5	5	8	5	1	1	2	12/17/96	Unger, et al.		424	450	
<i>ll</i>	5	5	3	6	4	8	9	07/16/96	Lohrmann, et al.		424	9.52	
<i>ll</i>	4	5	7	2	2	0	3	02/25/86	Feinstein		128	661	

FOREIGN PATENT DOCUMENTS											
EXAMINER INITIAL	DOCUMENT NUMBER					DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
										YES	NO
<i>ll</i>	0	5	5	4	2	1	3	08/93	Europe		
<i>ll</i>	9	3	2	5	2	4	2	12/93	Patent Cooperation Treaty (Abstract & Claims)		
<i>ll</i>	0	4	5	8	7	4	5	09/94	Europe		
<i>ll</i>	9	4	2	1	1	7	5	09/94	Patent Cooperation Treaty		
<i>ll</i>	9	0	0	1	9	5	2	03/90	WO		

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
<i>ll</i>	9	Absorption and scatter of encapsulated gas filled microspheres: theoretical considerations and some measurements, de Jong, et al., <i>Ultrasonics</i> , 30: No. 3, 95-103, 1992
<i>ll</i>	10	Simulated Capillary Blood Flow Measurement Using a Nonlinear Ultrasonic Contrast Agent, Schrophe, et al., <i>Ultrasonic Imaging</i> , 14: 134-158, 1992
<i>ll</i>	11	Liposomes, From Biophysics to Therapeutics, Edited by Mark J. Ostro, Marcel Dekker, Inc., New York, pp. 2-6, 17-21, 74 and 105.
<i>ll</i>	12	Foundation of Colloid Science, Volume 1, Hunter, et al., Clarendon Press, Oxford, pp. 20 & 22.
<i>ll</i>	13	Peripheral Vascular Doppler Examinations, Rae, II, Textbook of diagnostic ultrasonography, pp. 323-325.

EXAMINER	<i>WHEATLEY</i>	DATE CONSIDERED	<i>10/09/02</i>
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 809; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.			

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 O T P I F N E C E S S A R Y JC 22 AUG 16 2004 PATENT & TRADEMARK OFFICE		APPLICANT Schutt, et al.	
FILING DATE August 19, 2003		GROUP 1616	

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
<i>SC</i>	14 "Principles and Recent Developments in Ultrasound Contrast Agents", N. de Jong, et al., <i>Ultrasonics</i> , 29:324-330, 1991
<i>SC</i>	15 "First Ultrasound Contrast Agent Awaits OK from FDA", Greer, <i>Advance for Radiologic Science Professionals</i> , pp. 3-5, 1993
<i>SC</i>	16 Kitagawa, et al. <i>Biological Abstracts</i> 63:6392 (1977)
<i>SC</i>	17 Keough, et al. <i>Biological Abstracts</i> 81:105308 (1986)

EXAMINER <u>HAGERTY</u>	DATE CONSIDERED <u>10/19/09</u>
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
J	18	Matsuda, et al. "Contrast Echocardiography of the Left Heart by Intravenous Injection of Perfluorocchemical Emulsion" <i>J. of Cardiology</i> 13(4):1021-1028 (1983)
P	19	Sunamoto, et al. "Liposomal Membranes" <i>J. Biochem.</i> 88:1219-1226 (1980)
P	20	Mattrey, R.F., M.D., "Perfluorochlormide: A Liver/Spleen-Specific and Tumor-Imaging Ultrasound Contrast Material" <i>RADIOLOGY</i> 145(3):759-762 (1982)
D	21	Goldberg, et al., <i>Ultrasound in Med. & Biol.</i> 20:319-333 (1994)
D	22	Schrope, et al., <i>Ultrasound in Med. & Biol.</i> 19:567-579 (1993)
D	23	Mattrey, Art., <i>Cels, Blood subs., and Immob. Biotech</i> 22:295-313 (1994)

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R	4	6	5	8	8	5	6	04/14/87	Rasor, et al.	424	9	
C	4	9	0	4	4	7	9	02/27/90	Illum	424	490	
L	4	9	2	5	6	7	8	05/15/90	Ranney	424	493	
C	5	1	0	8	7	5	9	04/28/92	Ranney	424	493	
C	5	1	8	6	9	2	2	02/16/93	Shell, et al.	128	654	
A	5	1	9	0	9	8	2	03/02/93	Erbel, et al.	521	56	
T	5	3	0	5	7	5	7	04/26/94	Unger, et al.	128	662.02	
J	5	3	1	0	5	4	0	05/10/94	Giddey, et al.	424	9	
S	5	3	1	5	9	9	8	05/31/94	Tachibana, et al.	128	660.01	
D	5	3	7	6	3	8	0	12/27/94	Kikuchi, et al.	424	450	

FOREIGN PATENT DOCUMENTS												
EXAMINER INITIAL	DOCUMENT NUMBER						DATE	COUNTRY		CLASS	SUBCLASS	TRANSLATION
												YES NO
J	1	2	3	2	3	5	B1	10/31/84	EPO			
J	1	3	1	5	4	0	A2	01/16/85	EPO (Abstract and translation of Claims)			Claims
BB	2	3	1	0	9	1	A1	08/05/87	EPO			
D	5	8	6	8	7	5	A1	02/01/89	EPO			No
J	3	2	0	4	3	3	A3	06/14/89	EPO (Abstract and translation of Claims)			Claims
J	8	9	0	5	1	6	0	06/15/89	PCT			Abstract

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)											
J	24	Peter N. Burns, Radiological Medica 87:71-82 (Suppl. 1 et. n.5, 1994)										

EXAMINER	<i>Hearne</i>			DATE CONSIDERED	<i>10/19/04</i>		
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5 3 8 0 5 1 9 01/10/95	Schneider, et al.	424	9	
5 3 9 3 5 2 4 02/28/95	Quay	424	9	
5 4 0 9 6 8 8 04/25/95	Quay	424	9	
5 4 1 3 7 7 4 05/05/95	Schneider, et al.	424	9.51	
5 5 5 6 6 1 0 09/17/98	Yan, et al.	424	9.52	
5 5 5 8 0 9 4 09/24/98	Quay	128	662.02	
5 5 5 8 8 5 3 09/24/98	Quay	424	9.5	
5 5 5 8 8 5 4 09/24/98	Quay	424	9.52	
5 5 5 8 8 5 5 09/24/98	Quay	424	9.5	
5 5 5 8 8 5 6 09/24/98	Klaveness, et al.	424	9.37	

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES
8		3 0 3 5 1 8 9 08/25/89	Australia				
9 3 0 0 9 3 0		01/21/93	PCT				
9 3 0 2 7 1 2		02/18/93	PCT				
9 3 0 5 8 1 9		04/01/93	PCT				
9 3 0 6 8 6 9		04/15/93	PCT				
9 4 0 1 1 4 0		01/20/94	PCT (Abstract and translation of Claims)			Claims	

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		5 5 5 8 8 5 7 09/24/96	Klaveness, et al.		424	9.52	

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J		9	4	0	6	4	7	7	03/31/94	PCT				
D		9	4	0	8	7	0	7	04/28/94	PCT				
A		9	4	0	9	7	0	3	05/11/94	PCT				Claims
R		9	4	0	9	8	2	9	05/11/94	PCT				
E		6	0	6	6	1	3	A1	07/20/94	EPO				
O		9	4	1	6	7	3	8	08/04/94	PCT				

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		9	4	2	8	7	9					YES	NO
<i>SC</i>		9	4	2	8	7	9	12/22/94	PCT				
<i>SP</i>		9	4	2	8	9	3	9	12/22/94	PCT			
<i>WP</i>	A1	0	6	3	3	0	3	0	07/04/94	EPO			
<i>DP</i>		9	2	1	1	8	7	3	07/23/92	WO			
<i>SP</i>		6	5	2	8	0	3	B	09/08/94	Australia			
<i>TP</i>		9	6	2	8	0	9	0	09/16/96	WO			

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[NAI-2378:cd
031198]
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050597]
S:\DOCS\MCB\MCB-1104.DOC
110601
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060804